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Title: Understanding the diversity of bacterial and fungal interactions

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Understanding the diversity of bacterial and fungal interactions

Geoffrey House (B-10)

Soil is alive!

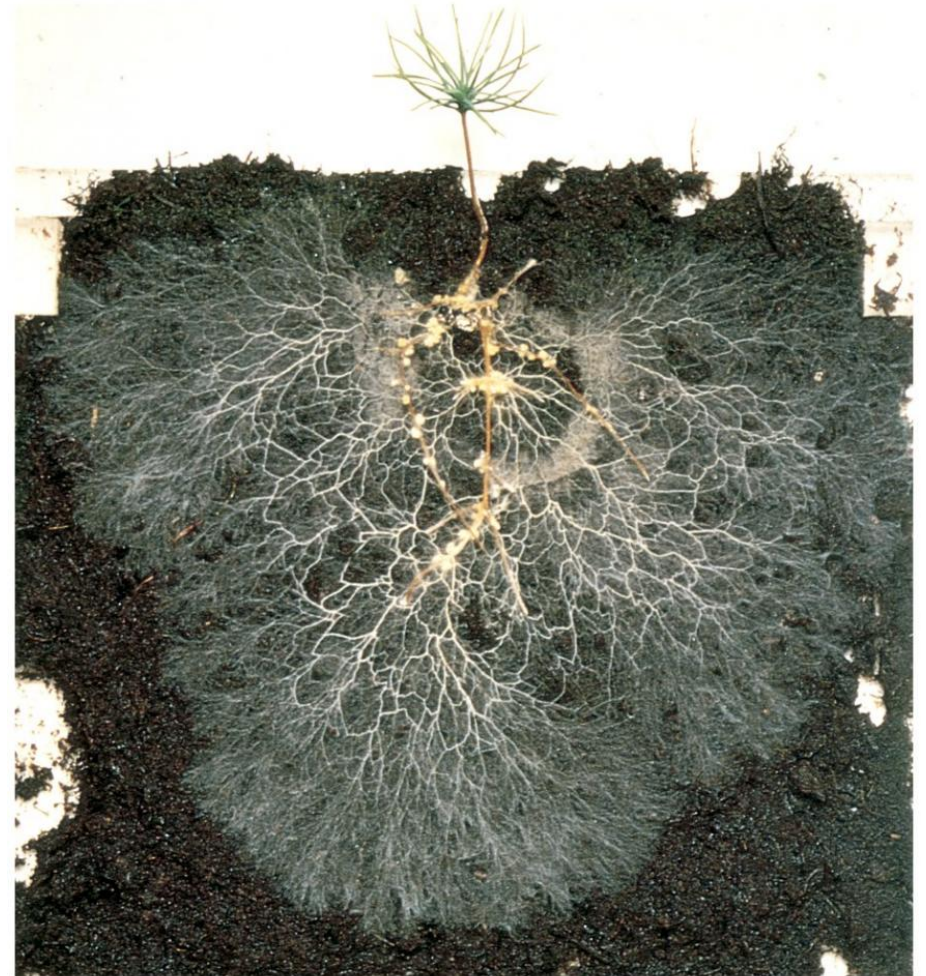
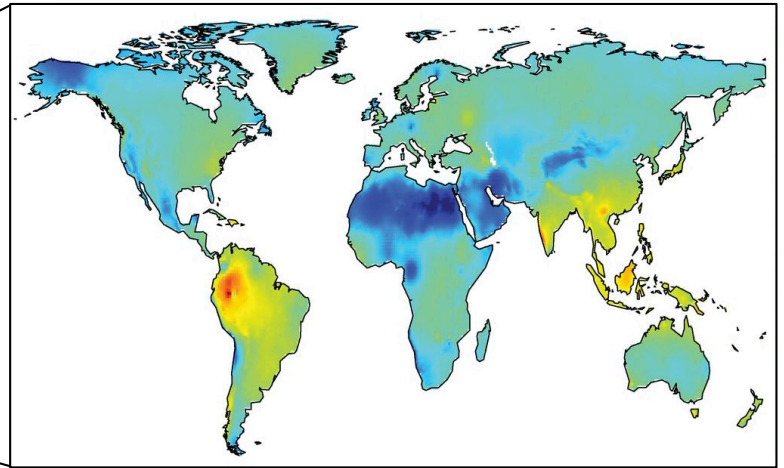
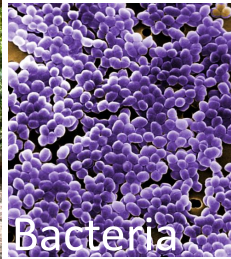


Figure 14-41
Biology of Plants, Seventh Edition
© 2005 W. H. Freeman and Company

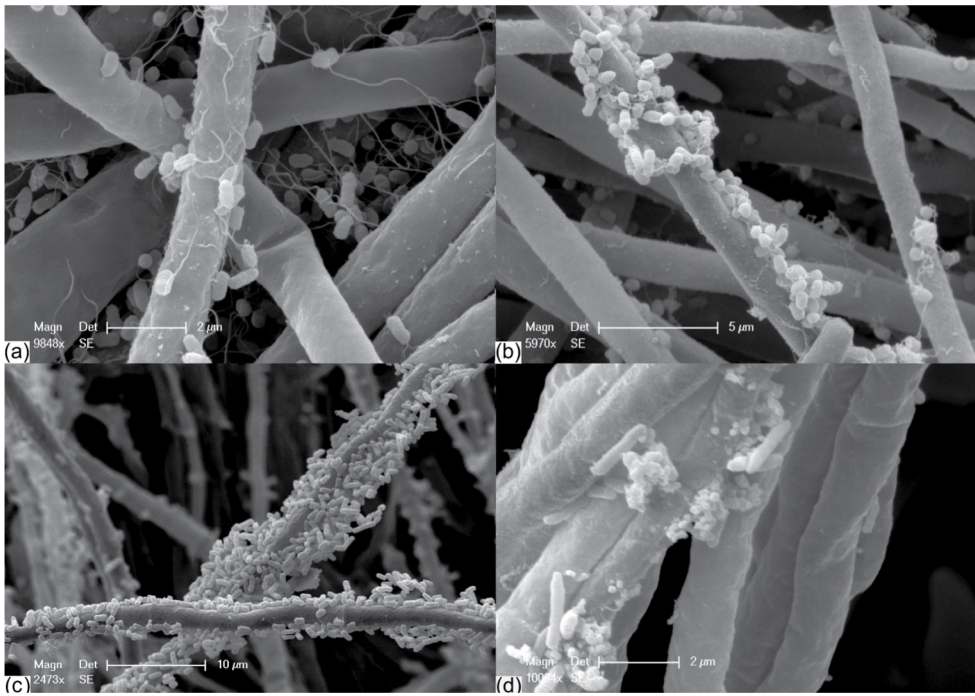
Bacteria and fungi are important to ecosystems



Tedersoo et al. 2014

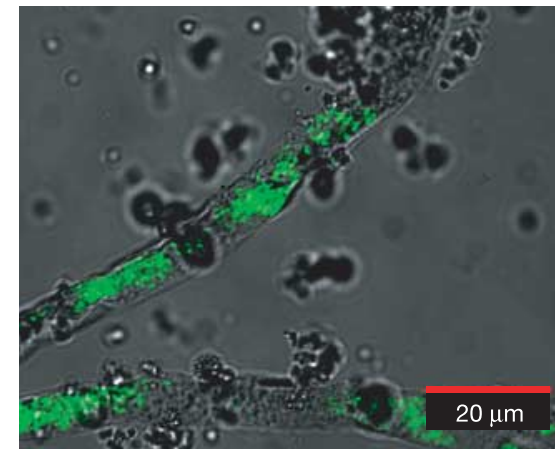
Bacteria and fungi can work together

Fungi can act as bacterial 'highways'...



Simon et al. 2015

... or as bacterial 'subways'



Partida-Martinez and Hertweck 2005

How do bacteria and fungi work together?

- “Who” interacts?
 - Screening fungal cultures
 - Mining fungal genome data
- What makes these interactions operate?
- What does this mean for ecosystems?
 - Affecting plant growth
 - Altering nutrient flows
 - Changing soil stability

Ultimately helping to shape landscapes

